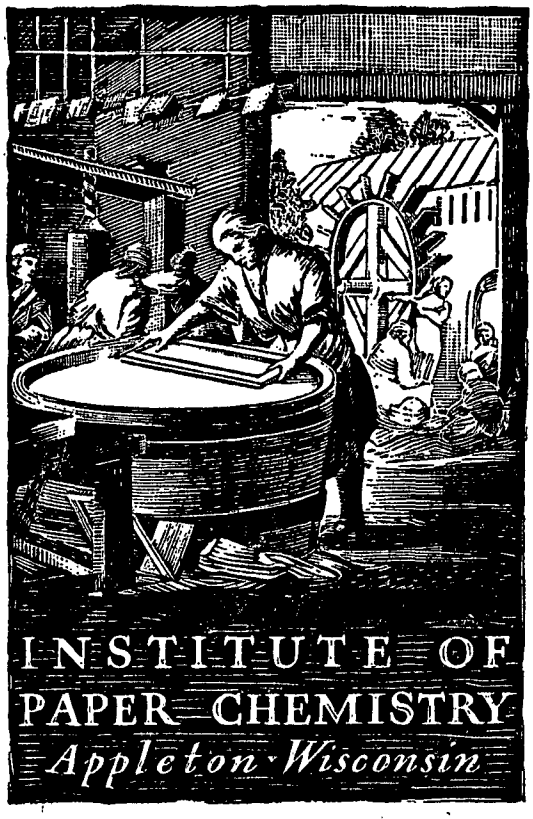

CONTINUOUS BASELINE STUDY

Project 1108-13

Progress Report 104

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

March 1, 1956

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASELINE STUDY

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FOURDRINIER KRAFT BOARD INSTITUTE, INC.

March 1, 1956

THE INSTITUTE OF PAPER CHEMISTRY

APPLETON, WISCONSIN

In conjunction with the F.K.I. Continuous Baseline Study, one hundred and four different sample lots of 42-lb. Fourdrinier kraft linerboard were submitted by seventeen different F.K.I. mills to The Institute of Paper Chemistry for testing during the period February 1 through February 29. In addition to the 42-lb. kraft linerboard, one sample of drum linerboard and two samples of miscellaneous linerboard were submitted for evaluation by one of the participating mills. The results on the special stock are tabulated separately in this report. A tabulation of the number of samples classified according to mill may be seen in Table I.

TABLE I

DISTRIBUTION OF 42-LB. LINERBOARD SAMPLES

Mill Code	Samples Submitted
A	6
B	6
C	8
D	9
E	3
F	3
G	9
H	10
I	7
J	6
K	2
L	8
M	5
N	5
O	1
P	11
Q	5
	104

These sample lots were tested for basis weight, caliper, bursting strength, and Elmendorf tear. The average strength results for each mill may be seen in Table II and are graphically presented in Figures 1 to 5. In addition to a comparison of the mill averages for the various tests, Table II also shows the current F.K.I. averages, the cumulative F.K.I. averages, and the F.K.I. indexes. The cumulative F.K.I. average is based on the results for the previous twelve months excluding the current period. Hence, in the case of the current report, it covers the period from February 1, 1955, to January 31, 1956. The F.K.I. indexes are obtained as follows:

$$\frac{\text{current F.K.I. average}}{\text{cumulative F.K.I. average}} \times 100 = \text{F.K.I. index (\%)}$$

The F.K.I. index provides a ready means of comparing the current quality with previous results. For example, the current F.K.I. average basis weight is 42.8 lb., and the cumulative F.K.I. average basis weight is 43.0 lb. Hence, the index for basis weight determined in per cent as indicated above is 99.5. This signifies that the current average basis weight is slightly lower than the cumulative average, which in this case covered the period from February 1, 1955, through January 31, 1956.

A comparison of the results in Table II and Figure 1 shows that the average basis weight results for all mills except Mill E conform to the 42-lb. specification set forth in Rule 41. Mill K has the highest average basis weight, it being 44.0 lb. or approximately 4.8% higher than the 42-lb. specification. On the other hand, Mill E has the lowest average basis weight, it being 41.6 lb., 1.0% lower than the 42-lb. specification.

The amount by which the mills vary from the 42-lb. specification is as follows:

Mill Code	Percent
A	+3.1
B	+1.7
C	+1.9
D	+1.2
E	-1.0
F	+1.9
G	+1.2
H	+2.6
I	+1.7
J	+3.3
K	+4.8
L	+1.7
M	+2.1
N	+1.4
O	+1.0
P	+2.9
Q	+1.4

A comparison of the average basis weight data for the previous period with the current F.K.I. average indicates that the basis weight results have decreased slightly from 43.0 lb. to 42.8 lb.

A comparison of the average caliper values for the various mills (see Figure 2) shows that the mill averages vary from a low of 11.9 points shared by Mills B, F, and O to a high of 13.6 points for Mill C. The current F.K.I. average is 12.8 points and the cumulative F.K.I. average is 12.7 points.

The average bursting strength values obtained for each mill are graphically presented in Figure 3. It may be observed in Table II and Figure 3 that the average bursting strength values for the various mills

range from a low of 100 for Mill K to a high of 121 for Mill O. The current F.K.I. average bursting strength is 109, the same as the cumulative F.K.I. average of 109. The current average is the same as that for the previous period, but the cumulative average has decreased slightly from 110 to 109 p.s.i.g.

A graphic comparison of the Elmendorf tear results for the various mills is given in Figures 4 and 5. The data of Table II show that Mill K has the highest average machine direction tear value of 390 units whereas Mill B has the lowest value of 312 units. Mill F has the highest cross-machine direction tear value of 421 units and Mill E has the lowest value of 346 units. It may be noted that the current F.K.I. average machine and cross-machine direction tear results are slightly lower than the cumulative averages. Both cumulative averages--i.e., in and across-direction--have decreased one unit since the previous period and the gap between the current and cumulative results appears to be closing.

A comparison of the F.K.I. indexes indicates that, for the current period, the current F.K.I. averages for basis weight and Elmendorf tear are slightly lower than the respective cumulative F.K.I. averages, whereas the current F.K.I. average for caliper is slightly higher than the cumulative, and the current F.K.I. average for bursting strength is the same as the cumulative.

In order to compare the variation within a given mill, the test results for each particular mill have been tabulated in Tables III to XIX

for Mills A to Q, respectively. In addition to the current and cumulative averages, the mill factor and mill index are given for each mill. The cumulative mill average is the average test result obtained on the samples submitted by the particular mill for the previous twelve months excluding the current period. The mill factor and the mill index are obtained as follows:

$$\frac{\text{current mill average}}{\text{cumulative mill average}} \times 100 = \text{mill factor (\%)}$$

$$\frac{\text{current mill average}}{\text{cumulative F.K.I. average}} \times 100 = \text{mill index (\%)}$$

The mill factor and the mill index serve as a ready means for comparing the current mill results either with the previous results for that particular mill or with the cumulative F.K.I. results. The reports also contain a comparison of the test data obtained at the mills with test data obtained at The Institute of Paper Chemistry.

The results obtained on the special drum stock may be seen in Table XX.

It may be noted in Tables III through XX that the test data include information about the sheet finish. The summarized results for the mills which submitted sample lots during the current period are as follows:

Mill Code	No. of Sample Lots W.F.	D.F.	Misc.
A	6		
B	6		
C	8[a]		
D	9		
E	3[a], 1b		

Mill Code	No. of Sample Lots W.F.	D.F.	Misc.
F	3		
G	9		
H	10		
I	7[a]		
J	6		
K	2		
L			8[c]
M	5		
N	5[a]		
O	1		
P	11		
Q	5[a]		

[a] One side only; [b] Drum Linerboard; [c] Sheet finish not reported.

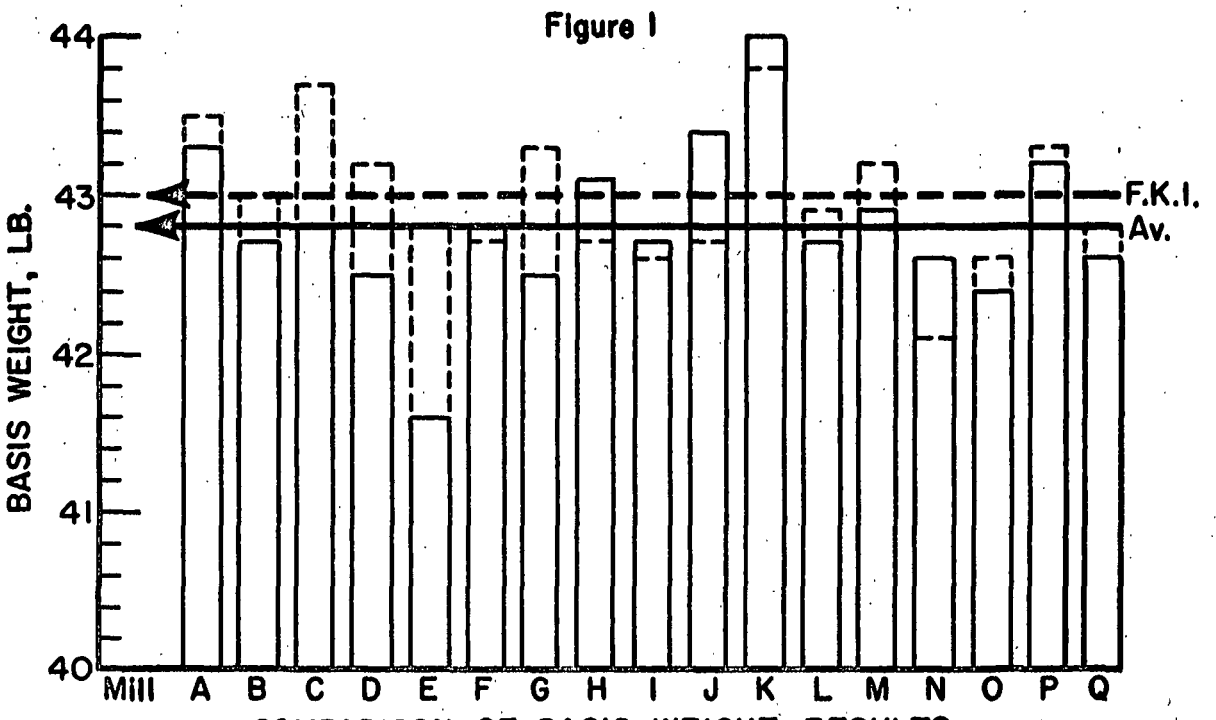
The results indicate that a majority of the mills are using a water finish on their 42-lb. linerboard.

TABLE II

SUMMARY OF COMPOSITE MILL AVERAGES--FEBRUARY 1 THROUGH FEBRUARY 29, 1956

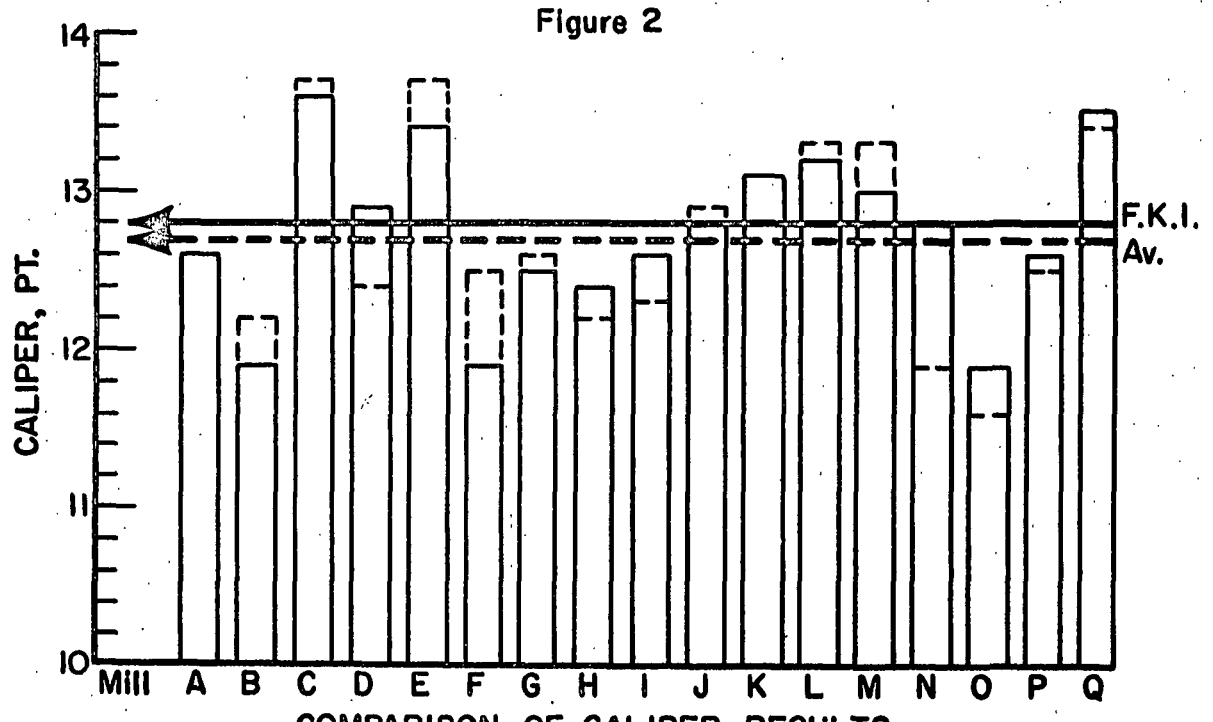
Mill	Basis Weight, lb.	Caliper, points	Bursting Strength, p.s.i. gage	Elmendorf Tear, g./sheet	
				In Machine	Cross Machine
A	43.3	12.6	109	321	375
B	42.7	11.9	118	312	365
C	42.8	13.6	104	321	362
D	42.5	12.9	108	355	385
E	41.6	13.4	108	321	346
F	42.8	11.9	103	380	421
G	42.5	12.5	109	317	364
H	43.1	12.4	107	348	389
I	42.7	12.6	107	317	379
J	43.4	12.8	108	384	373
K	44.0	13.1	100	390	386
L	42.7	13.2	112	330	375
M	42.9	13.0	115	354	382
N	42.6	12.8	107	378	418
O	42.4	11.9	121	361	418
P	43.2	12.6	113	354	392
Q	42.6	13.5	107	330	362
Current FKI Average:	42.8	12.8	109	345	382
Cumulative FKI Average:	43.0	12.7	109	353	383
FKI Index, %	99.5	100.8	100.0	97.7	99.7

Figure 1



COMPARISON OF BASIS WEIGHT RESULTS
(Period Feb. 1 - Feb. 29, 1956)

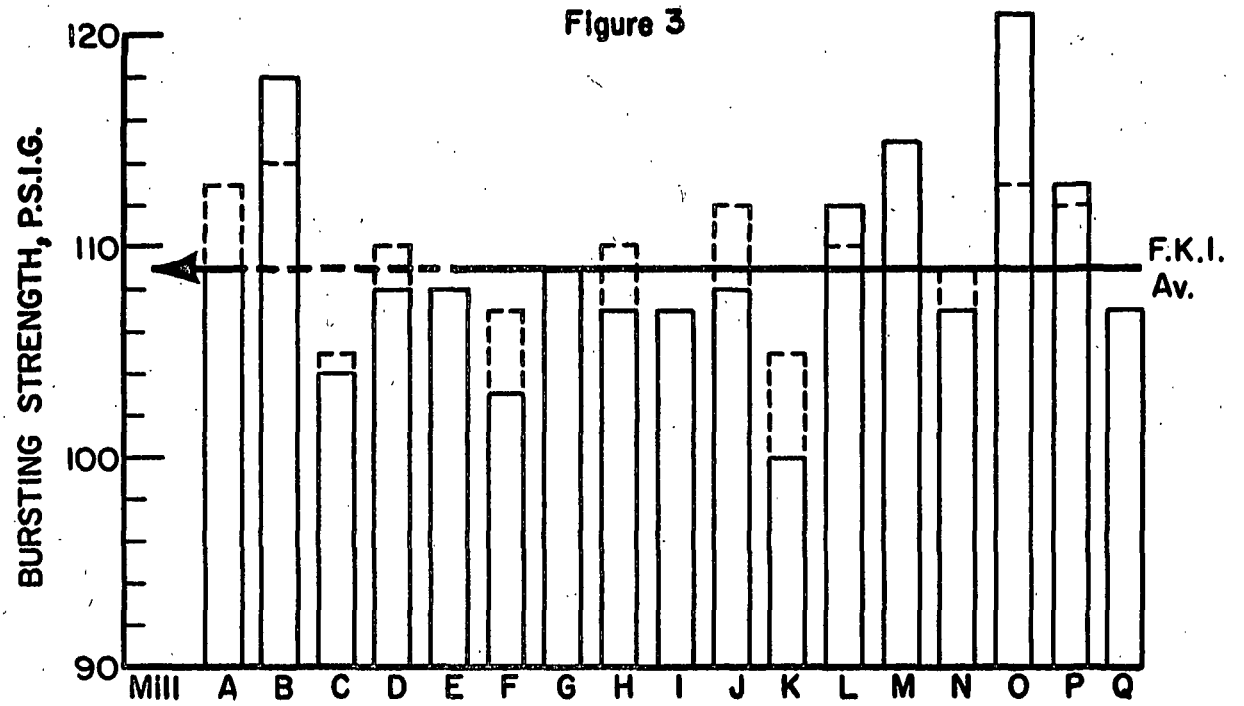
Figure 2



COMPARISON OF CALIPER RESULTS
(Period Feb. 1 - Feb. 29, 1956)

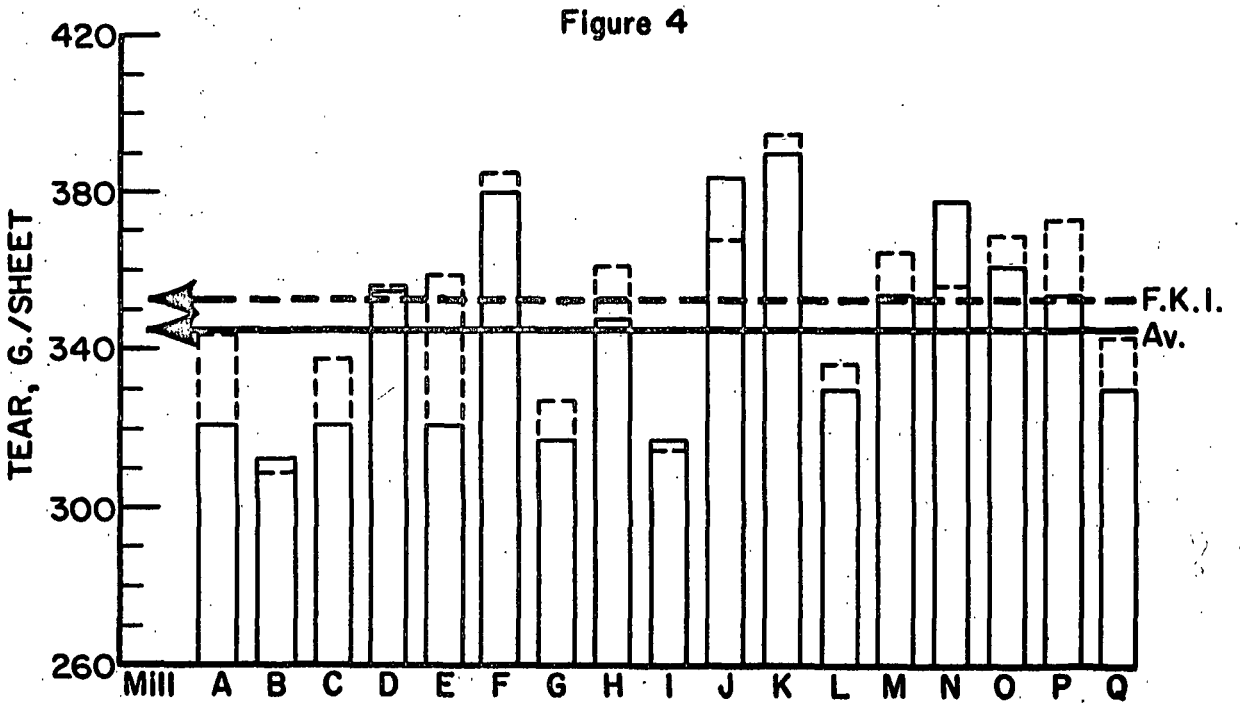
——— Current mill average
- - - - - Cumulative mill average

Figure 3



COMPARISON OF BURSTING STRENGTH RESULTS
(Period Feb. 1 – Feb. 29, 1956)

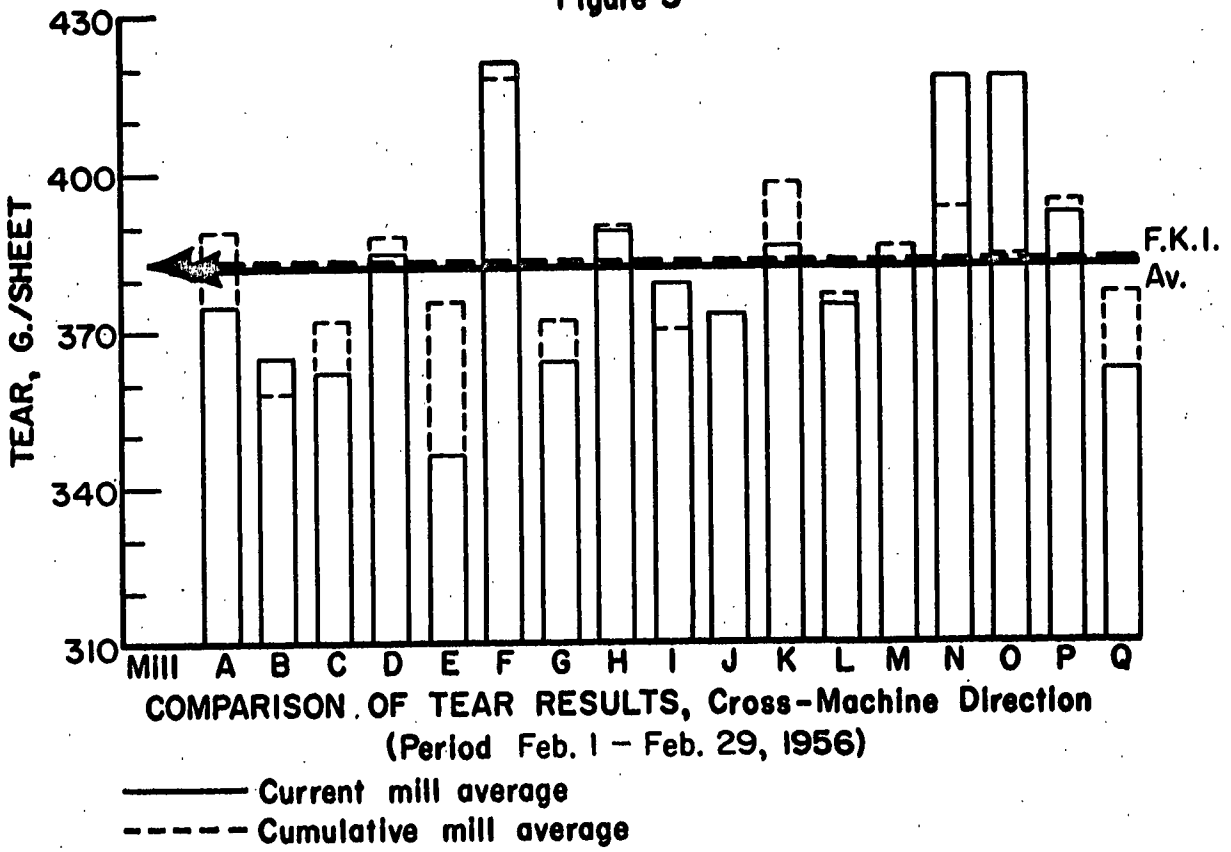
Figure 4



COMPARISON OF TEAR RESULTS, Machine Direction
(Period Feb. 1 – Feb. 29, 1956)

——— Current mill average
– – – – – Cumulative mill average

Figure 5



COMPARISON OF TEAR RESULTS, Cross-Machine Direction
(Period Feb. 1 – Feb. 29, 1956)

——— Current mill average
- - - - - Cumulative mill average

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956

TABLE III

MILL A--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168262	A-726	W.F.	2/ 4/56	1/29/56	1	44.4	43.0	43.5	13.1	11.6	12.6	126	76	102	360	296	327[a]	400	320	361[a]
168263	A-727	W.F.	2/ 4/56	1/30/56	2	43.6	42.0	42.6	13.2	12.2	12.8	126	86	112	344	240	306	424	352	385[a]
168373	A-728	W.F.	2/11/56	2/ 5/56	2	44.0	43.0	43.6	13.2	12.5	12.8	124	82	107	384	288	343	408	344	376[a]
168374	A-729	W.F.	2/11/56	2/ 7/56	1	44.0	42.0	43.7	12.9	12.0	12.4	135	74	110	400	320	339[a]	416	336	385[a]
168492	A-730	W.F.	2/18/56	2/12/56	1	44.0	42.2	42.9	12.9	12.0	12.5	131	83	111	336	264	300	400	336	373[a]
168493	A-731	W.F.	2/18/56	2/12/56	1	44.0	43.0	43.6	13.0	12.2	12.6	130	100	111	336	240	309	384	344	371[a]
Current Mill Average:								43.3			12.6			109			321			375
Cumulative Mill Average:								43.5			12.6			113			344			389
Mill Factor, %								99.5			100.0			96.5			93.3			96.4
Mill Index, %								100.7			99.2			100.0			90.9			97.9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE IV

MILL B--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168251	B-1266	W.F.	2/ 3/56	1/25/56	1	44.0	41.2	42.5	12.5	11.5	11.9	133	104	117	368	264	297[a]	392	304	363[a]
168252	B-1267	W.F.	2/ 3/56	1/27/56	1	43.0	41.4	42.2	12.3	11.5	11.8	133	100	116	344	240	291[a]	416	328	361[a]
168375	B-1268	W.F.	2/11/56	2/ 1/56	1	43.8	42.0	42.9	12.8	11.5	12.0	133	104	117	328	280	307[a]	408	336	371[a]
168376	B-1269	W.F.	2/11/56	2/ 4/56	1	44.0	41.8	43.0	12.4	11.4	11.9	135	104	118	432	280	343[a]	416	320	358[a]
168405	B-1270	W.F.	2/14/56	2/ 8/56	1	43.2	42.0	42.7	12.3	11.3	11.8	135	93	120	344	264	313[a]	400	328	367[a]
168406	B-1271	W.F.	2/14/56	2/10/56	1	43.8	41.6	42.6	12.5	11.4	12.0	140	92	118	400	264	320[a]	416	328	371[a]
Current Mill Average:								42.7			11.9			118			312			365
Cumulative Mill Average:								43.0			12.2			114			309			358
Mill Factor, %								99.3			97.5			103.5			101.0			102.0
Mill Index, %								99.3			93.7			108.3			88.4			95.3

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE V

MILL C--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168264	C-729	WF ISL	2/ 4/56	1/16/56	1	44.0	42.2	43.1	14.0	13.1	13.4	120	84	105	368	280	319[a]	400	344	377[a]
168265	C-730	WF ISL	2/ 4/56	1/16/56	1	44.2	42.4	43.1	14.0	12.8	13.5	120	85	106	352	272	317	376	320	351[a]
168266	C-731	WF ISL	2/ 4/56	1/19/56	1	44.4	42.2	43.3	14.7	13.2	13.9	123	93	108	368	288	324[a]	416	336	373[a]
168267	C-732	WF ISL	2/ 4/56	1/19/56	1	44.2	42.0	43.4	14.4	13.4	14.0	124	81	106	376	296	327[a]	384	328	355[a]
168268	C-733	WF ISL	2/ 4/56	1/24/56	1	44.2	41.8	42.7	14.1	13.0	13.6	118	74	103	360	272	333[a]	432	336	367[a]
168269	C-734	WF ISL	2/ 4/56	1/24/56	1	44.2	41.8	42.7	14.0	13.0	13.5	120	82	102	360	264	320[a]	400	344	367[a]
168270	C-735	WF ISL	2/ 4/56	1/26/56	1	43.2	41.8	42.4	14.2	12.4	13.5	117	88	103	360	280	317[a]	400	320	364[a]
168271	C-736	WF ISL	2/ 4/56	1/26/56	1	43.0	41.6	42.2	14.0	12.7	13.6	119	85	102	336	264	311[a]	368	296	341[a]
Current Mill Average:								42.8			13.6			104			321			362
Cumulative Mill Average:								43.7			13.7			105			338			372
Mill Factor, %								97.9			99.3			99.0			95.0			97.3
Mill Index, %								99.5			107.1			95.4			90.9			94.5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE VI

MILL D--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168272	D-943	W.F.	2/ 6/56	2/ 2/56	4	43.6	42.2	42.9	13.6	12.6	13.0	125	90	105	400	304	349[a]	456	320	393[a]
168273	D-944	W.F.	2/ 6/56	2/ 3/56	4	42.0	40.8	41.4	12.9	12.2	12.6	127	84	108	416	320	351[a]	400	336	357[a]
168274	D-945	W.F.	2/ 6/56	2/ 4/56	4	44.2	41.4	42.6	13.1	12.5	12.8	138	74	105	400	320	348[a]	400	352	375[a]
168436	D-946	W.F.	2/15/56	2/ 9/56	4	42.8	41.4	42.1	13.5	12.7	13.0	127	84	108	384	320	349[a]	432	344	381[a]
168437	D-947	W.F.	2/15/56	2/10/56	4	43.2	42.2	42.7	13.2	12.3	12.8	133	77	111	408	304	354[a]	456	368	405[a]
168438	D-948	W.F.	2/15/56	2/11/56	4	42.2	40.8	41.6	13.5	12.3	13.0	125	98	112	400	296	361[a]	432	328	377[a]
168504	D-949	W.F.	2/20/56	2/15/56	4	44.6	42.0	43.4	14.0	12.8	13.3	138	74	106	416	288	355[a]	448	352	403[a]
168505	D-950	W.F.	2/20/56	2/16/56	4	44.0	42.4	43.2	13.1	12.3	12.8	139	82	108	400	312	363	432	296	379[a]
168506	D-951	W.F.	2/20/56	2/17/56	4	43.2	42.0	42.6	13.4	12.4	12.9	136	88	107	408	320	361[a]	424	352	393[a]
Current Mill Average:								42.5			12.9			108			355			385
Cumulative Mill Average:								43.2			12.4			110			356			388
Mill Factor, %								98.4			104.0			98.2			99.7			99.2
Mill Index, %								98.8			101.6			99.1			100.6			100.5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE VII

MILL E--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168324	E-203	WFlS	2/ 8/56	2/ 3/56	2	42.2	41.0	41.8	14.0	12.9	13.4	128	90	112	360	272	319[a]	376	336	359[a]
168453	E-205	WFlS	2/16/56	2/13/56	2	41.6	39.6	40.7	13.1	11.9	12.6	124	82	107	368	280	323[a]	392	272	336[a]
168578	E-206	WFlS	2/24/56	2/22/56	2	43.0	41.8	42.2	14.7	13.0	14.0	128	79	105	384	280	322[a]	392	320	343[a]
Current Mill Average:								41.6			13.4			108			321			346
Cumulative Mill Average:								42.8			13.7			108			359			376
Mill Factor, %								97.2			97.8			100.0			89.4			92.0
Mill Index, %								96.7			105.5			99.1			90.9			90.3

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE VIII

MILL F--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168498	F-6	W.B.	2/18/56	1/20/56	-	46.0	42.0	43.9	12.3	11.5	12.0	124	68	100	400	288	367[a]	464	384	419[a]
168474	F-7	W.B.	2/17/56	1/24/56	-	42.8	41.0	42.0	12.9	11.3	11.9	119	85	105	432	344	389[a]	480	368	405[a]
168499	F-8	W.B.	2/18/56	1/25/56	-	44.0	42.0	42.6	12.8	11.2	11.9	127	89	103	440	352	385[a]	544	384	439[a]
Current Mill Average:								42.8			11.9			103			380			421
Cumulative Mill Average:								42.7			12.5			107			385			418
Mill Factor, %								100.2			95.2			96.3			98.7			100.7
Mill Index, %								99.5			93.7			94.5			107.6			109.9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE IX

MILL G--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168435	G-708	W.F.	2/15/56	1/ 2/56	1	43.6	41.8	42.6	13.3	12.0	12.6	147	85	105	424	296	354[a]	400	336	365[a]
168407	G-709	W.F.	2/14/56	1/ 3/56	1	43.6	41.8	42.4	13.3	12.0	12.6	126	88	105	384	280	331[a]	384	344	364[a]
168408	G-710	W.F.	2/14/56	2/ 4/56	1	43.8	41.8	42.7	13.5	11.5	12.6	129	82	105	440	304	348[a]	424	320	371[a]
168475	G-711	W.F.	2/17/56	2/ 9/56	2	42.2	41.0	41.7	13.1	12.0	12.4	129	85	108	336	280	303[a]	400	320	362[a]
168508	G-712	W.F.	2/20/56	2/10/56	2	42.4	41.2	41.8	13.0	11.9	12.3	127	82	102	336	280	299[a]	368	320	349[a]
168509	G-713	W.F.	2/20/56	2/14/56	2	43.6	41.2	42.4	12.8	11.5	12.2	140	78	112	328	248	283	392	328	353[a]
168510	G-714	W.F.	2/20/56	2/ 9/56	2	44.0	42.0	42.9	13.0	11.9	12.4	129	90	113	352	288	307	392	336	361[a]
168511	G-715	W.F.	2/20/56	2/14/56	2	44.0	42.0	43.3	13.0	12.0	12.6	147	91	116	360	272	306	424	344	375[a]
168512	G-716	W.F.	2/20/56	2/14/56	2	44.0	41.6	42.8	13.3	12.0	12.5	151	93	114	376	272	323	424	336	381[a]
Current Mill Average:								42.5			12.5			109			317			364
Cumulative Mill Average:								43.3			12.6			109			327			372
Mill Factor, %								98.2			99.2			100.0			96.9			97.8
Mill Index, %								98.8			98.4			100.0			89.8			95.0

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE X

MILL H--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168198	H-555	W.F.[b]	2/ 1/56	1/20/56	2	44.2	42.4	43.4	12.9	11.9	12.4	134	86	109	376	296	336[a]	416	336	377[a]
168199	H-556	W.F.[b]	2/ 1/56	1/21/56	2	44.0	42.0	43.2	13.0	12.0	12.5	132	79	105	416	296	359[a]	456	352	401[a]
168202	H-557	W.F.[b]	2/ 1/56	1/23/56	2	44.0	43.2	43.7	12.9	12.0	12.4	142	67	108	392	312	346[a]	448	376	407[a]
168203	H-558	W.F.[b]	2/ 1/56	1/24/56	2	44.4	42.2	43.6	12.8	11.6	12.2	145	84	113	392	312	354[a]	480	360	401[a]
168377	H-559	W.F.[b]	2/11/56	1/31/56	2	43.4	42.0	42.8	12.7	11.8	12.1	142	73	104	400	280	345[a]	408	352	377[a]
168378	H-560	W.F.[b]	2/11/56	2/ 2/56	2	44.0	42.4	43.4	13.0	12.1	12.6	134	82	104	400	312	360[a]	440	376	400[a]
168439	H-561	W.F.[b]	2/15/56	2/ 6/56	2	42.6	41.0	42.0	12.9	12.3	12.7	122	83	103	416	320	345	448	336	384[a]
168440	H-562	W.F.[b]	2/15/56	2/ 7/56	2	44.0	42.4	43.5	12.9	12.1	12.7	138	84	110	408	312	363	432	360	395[a]
168500	H-563	W.F.[b]	2/18/56	2/12/56	2	45.0	42.6	43.5	12.9	12.0	12.6	135	80	107	368	288	334[a]	408	320	377[a]
168501	H-564	W.F.[b]	2/18/56	2/13/56	2	43.0	41.8	42.3	12.9	12.0	12.4	134	72	102	360	312	337	416	344	367[a]
Current Mill Average:								43.1			12.4			107			348			389
Cumulative Mill Average:								42.7			12.2			110			361			390
Mill Factor, %								100.9			101.6			97.3			96.4			99.7
Mill Index, %								100.2			97.6			98.2			98.6			101.6

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

[b]The mill data sheet identifies the finish as WFLS.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XI

MILL I--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168200	I-523	WF1S	2/ 1/56	1/19/56	1	43.6	40.8	42.2	13.0	12.0	12.4	117	87	104	368	280	323[a]	416	344	369[a]
168201	I-524	WF1S	2/ 1/56	1/19/56	1	43.4	41.8	42.6	13.0	12.1	12.6	117	75	104	376	272	321[a]	400	328	369[a]
168359	I-525	WF1S	2/10/56	2/ 2/56	1	44.0	42.2	43.0	13.5	12.0	12.6	121	80	103	376	272	317[a]	416	344	387[a]
168360	I-526	WF1S	2/10/56	2/ 3/56	1	44.0	41.8	43.0	13.4	12.3	12.8	134	88	107	360	280	327[a]	416	328	373[a]
168473	I-527	WF1S	2/17/56	2/ 7/56	1	43.8	42.0	42.9	13.1	12.6	12.9	129	95	112	368	272	315[a]	408	336	378[a]
168514	I-528	WF1S	2/20/56	2/ 8/56	1	43.0	41.8	42.4	13.0	11.7	12.2	129	92	108	336	256	305	464	320	381[a]
168515	I-529	WF1S	2/20/56	2/15/56	1	43.6	41.8	42.6	13.0	12.0	12.3	120	92	107	344	288	313	464	368	398[a]
Current Mill Average:								42.7			12.6			107			317			379
Cumulative Mill Average:								42.6			12.3			107			315			370
Mill Factor, %								100.2			102.4			100.0			100.6			102.4
Mill Index, %								99.3			99.2			98.2			89.8			99.0

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XII

MILL J--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168210	J-577	W.F.	2/ 1/56	1/24/56	-	44.0	42.2	43.3	13.2	12.2	12.7	131	90	110	408	336	381[a]	448	344	390[a]
168211	J-578	W.F.	2/ 1/56	1/24/56	-	44.2	42.8	43.6	13.3	12.1	12.8	122	91	109	424	344	399[a]	416	352	379[a]
168494	J-579	W.F.	2/18/56	1/24/56	-	44.2	41.8	43.1	14.0	12.5	13.1	125	84	108	464	336	377[a]	400	320	365[a]
168495	J-580	W.F.	2/18/56	2/ 8/56	-	44.0	42.4	43.2	13.5	12.0	12.6	126	99	111	440	336	380[a]	416	328	374[a]
168496	J-581	W.F.	2/18/56	2/ 8/56	-	44.4	43.2	43.7	13.6	11.9	12.7	126	75	103	440	336	387[a]	400	336	367[a]
168497	J-582	W.F.	2/18/56	2/ 9/56	-	44.0	42.0	43.7	13.9	12.2	13.1	122	90	106	448	352	382[a]	400	320	361[a]
Current Mill Average:								43.4			12.8			108			384			373
Cumulative Mill Average:								42.7			12.9			112			368			373
Mill Factor, %								101.6			99.2			96.4			104.3			100.0
Mill Index, %								100.9			100.8			99.1			108.8			97.4

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XIII

MILL K--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168280	K-4	S.F.	2/ 6/56	2/ 1/56	7	44.6	41.0	42.8	13.6	12.3	13.0	118	73	100	448	312	362[a]	416	320	373[a]
168507	K-5	S.F.	2/20/56	2/15/56	7	46.2	43.2	45.4	13.7	12.7	13.1	125	74	100	480	368	418[a]	464	368	399[a]
Current Mill Average:								44.0			13.1			100			390			386
Cumulative Mill Average:								43.8			13.1			105			395			398
Mill Factor, %								100.5			100.0			95.2			98.7			97.0
Mill Index, %								102.3			103.1			91.7			110.5			100.8

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XIV

MILL L--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168275	L-425		2/ 6/56	1/ 9/56	1	44.0	42.2	43.1	13.9	12.3	13.0	137	91	111	360	288	323[a]	432	344	372[a]
168276	L-426		2/ 6/56	1/11/56	1	44.4	41.6	42.9	14.3	12.2	13.6	130	94	116	368	296	333[a]	456	360	387[a]
168277	L-427		2/ 6/56	1/17/56	1	43.2	40.4	42.2	14.0	12.3	13.3	130	90	112	384	280	327[a]	416	320	375[a]
168278	L-428		2/ 6/56	1/20/56	1	43.4	40.6	41.7	14.0	12.7	13.3	146	85	114	352	304	327[a]	416	352	377[a]
168379	L-429		2/11/56	1/25/56	1	44.0	42.0	42.5	13.1	11.9	12.6	137	94	116	368	280	326[a]	400	304	363[a]
168380	L-430		2/11/56	1/29/56	1	44.0	43.0	43.8	14.2	12.0	13.5	134	91	110	384	304	351[a]	408	328	371[a]
168549	L-431		2/21/56	2/ 2/56	1	44.0	42.0	43.0	14.0	12.1	13.2	131	97	112	368	304	331[a]	440	336	381[a]
168550	L-432		2/21/56	2/ 6/56	1	44.0	41.6	42.8	14.2	12.9	13.4	123	90	108	384	288	319[a]	432	336	372[a]
Current Mill Average:								42.7			13.2			112			330			375
Cumulative Mill Average:								42.9			13.3			110			337			377
Mill Factor, %								99.5			99.2			101.8			97.9			99.5
Mill Index, %								99.3			103.9			102.8			93.5			97.9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XV.

MILL M--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168204	M-361	W.	2/ 1/56	1/20/56	4	44.8	42.4	43.4	13.8	12.8	13.2	131	93	112	416	328	355[a]	400	328	363[a]
168253	M-362	W.	2/ 3/56	1/23/56	2	43.0	40.6	41.9	13.8	12.4	12.9	131	100	112	384	320	349[a]	448	336	391[a]
168411	M-363	W.	2/14/56	2/ 1/56	4	44.4	42.2	43.5	13.6	12.6	12.9	130	100	114	400	320	362[a]	400	344	371[a]
168412	M-364	W.	2/14/56	2/ 7/56	4	44.0	41.6	43.0	13.7	12.8	13.2	132	93	117	376	320	344[a]	432	344	387[a]
168577	M-365	W.	2/24/56	2/ 9/56	4	44.2	41.2	42.6	13.8	12.4	13.0	136	100	118	384	320	359[a]	456	352	399[a]
Current Mill Average:								42.9			13.0			115			354			382
Cumulative Mill Average:								43.2			13.3			109			365			386
Mill Factor, %								99.3			97.7			105.5			97.0			99.0
Mill Index, %								99.8			102.4			105.5			100.3			99.7

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XVI

MILL N--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168205	N-183	WFlS	2/ 1/56	1/21/56	1	43.0	41.4	42.3	13.5	12.0	12.7	135	95	114	424	336	383[a]	456	376	420[a]
168206	N-184	WFlS	2/ 1/56	1/21/56	1	43.0	41.0	42.0	13.1	12.0	12.5	123	92	108	416	336	375[a]	448	368	410[a]
168409	N-185	WFlS	2/14/56	2/ 1/56	1	43.0	41.8	42.1	13.4	12.3	12.8	122	82	107	440	320	370[a]	520	360	414[a]
168410	N-186	WFlS	2/14/56	2/ 1/56	1	44.0	42.8	43.5	13.5	12.5	12.9	127	85	101	440	296	375	464	384	413[a]
168513	N-187	WFlS	2/20/56	2/13/56	1	45.6	42.0	43.2	13.4	12.4	12.9	121	90	104	456	336	384[a]	480	400	435[a]
Current Mill Average:								42.6			12.8			107			378			418
Cumulative Mill Average:								42.1			11.9			109			356			393
Mill Factor, %								101.2			107.6			98.2			106.2			106.4
Mill Index, %								99.1			100.8			98.2			107.1			109.1

TABLE XVII

MILL O--42-LB. LINERBOARD

168249	O-104	W.F.	2/ 2/56	1/23/56	4	43.6	41.2	42.4	12.4	11.6	11.9	135	100	121	408	328	361[a]	472	376	418[a]
Current Mill Average:								42.4			11.9			121			361			418
Cumulative Mill Average:								42.6			11.6			113			369			384
Mill Factor, %								99.5			102.6			107.1			97.8			108.9
Mill Index, %								98.6			93.7			111.0			102.3			109.1

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XVIII

MILL P--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168242	P-144	W.F.	2/ 2/56	1/10/56	-	45.0	43.0	44.2	13.0	12.2	12.6	142	90	115	392	328	351[a]	464	368	417[a]
168243	P-145	W.F.	2/ 2/56	1/10/56	-	44.6	42.6	43.9	12.9	11.9	12.4	137	96	117	376	296	348[a]	464	368	405[a]
168244	P-146	W.F.	2/ 2/56	1/10/56	-	45.4	42.0	43.5	13.4	12.0	12.5	143	95	116	392	320	353[a]	480	368	412[a]
168245	P-147	W.F.	2/ 2/56	1/10/56	-	45.2	41.6	43.3	12.6	11.9	12.2	133	95	114	416	280	349[a]	464	360	400[a]
168246	P-148	W.F.	2/ 2/56	1/11/56	-	44.2	42.4	43.4	13.1	12.0	12.6	148	100	117	424	320	373[a]	432	352	388[a]
168247	P-149	W.F.	2/ 2/56	1/12/56	-	44.4	42.0	43.3	12.7	11.8	12.1	137	88	113	416	352	381[a]	440	360	395[a]
168248	P-150	W.F.	2/ 2/56	1/20/56	-	44.6	42.0	43.1	14.3	12.5	13.2	133	70	109	408	304	348[a]	432	320	372[a]
168612	P-151	W.F.	2/25/56	2/ 1/56	-	42.4	40.0	41.4	13.0	12.1	12.6	141	82	110	384	288	323[a]	392	320	363[a]
168613	P-152	W.F.	2/25/56	2/ 1/56	-	44.6	42.8	43.8	13.2	11.3	12.5	142	100	119	424	336	365[a]	432	360	393[a]
168614	P-153	W.F.	2/25/56	2/17/56	-	43.6	41.8	42.4	13.1	12.4	12.7	126	100	110	400	304	349[a]	408	352	377[a]
168615	P-154	W.F.	2/25/56	2/17/56	-	44.2	41.8	43.1	13.9	12.3	13.2	128	72	107	400	328	360[a]	416	352	387[a]
Current Mill Average:								43.2			12.6			113			354			392
Cumulative Mill Average:								43.3			12.5			112			373			394
Mill Factor, %								99.8			100.8			100.9			94.9			99.5
Mill Index, %								100.5			99.2			103.7			100.3			102.3

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XIX

MILL Q--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
168279	Q-54	WF1S	2/ 6/56	1/30/56	-	45.0	41.8	43.1	14.5	13.2	13.8	124	81	106	400	248	330[a]	416	320	365[a]
168413	Q-55	WF1S	2/14/56	2/ 3/56	3	44.2	41.8	42.9	14.0	12.8	13.3	128	97	113	376	288	329[a]	432	328	379[a]
168414	Q-56	WF1S	2/14/56	2/ 5/56	3	43.2	41.0	42.3	13.6	12.2	12.9	132	88	106	424	272	327[a]	384	320	344[a]
168415	Q-57	WF1S	2/14/56	2/ 6/56	3	45.4	42.2	43.5	15.6	13.5	14.4	122	82	104	400	328	358[a]	424	344	371[a]
168516	Q-58	WF1S	2/20/56	2/15/56	3	43.0	40.2	41.4	13.6	12.5	13.0	127	81	107	352	264	305[a]	368	320	349[a]
Current Mill Average:								42.6			13.5			107			330			362
Cumulative Mill Average:								42.8			13.4			107			343			377
Mill Factor, %								99.5			100.7			100.0			96.2			96.0
Mill Index, %								99.1			106.3			98.2			93.5			94.5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XX

MILL E--MISCELLANEOUS

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
47-lb. Drum Linerboard																				
168323	E-202	W.F.	2/ 8/56	1/ 31/56	2	48.0	45.4	46.8	14.9	13.9	14.3	122	91	104	464	344	405[a]	488	368	426[a]
Current Mill Average:								46.8			14.3			104			405			426
Cumulative Mill Average:								47.1			14.2			100			392			399
Mill Factor, %								99.4			100.7			104.0			103.3			106.8
33-lb. Linerboard																				
168383	E-204	WFlS	2/13/56	2/ 9/56	2	33.8	32.0	32.6	11.0	9.0	10.1	90	60	77	336	216	275[a]	352	216	267[a]
38-lb. Linerboard																				
168207	E-201	WFlS	2/ 1/56	1/27/56	2	38.2	37.0	37.8	12.4	11.3	11.9	114	68	92	360	264	299[a]	392	272	305[a]

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

As a supplementary part of the Continuous Baseline Study, comparison of the mill test results with those obtained at The Institute of Paper Chemistry on corresponding samples have been included in this report. As may be noted in Table XXI, the atmospheric conditions used prior to and during the testing period varied considerably.

TABLE XXI

	Preconditioning			Conditioning		
Code	R.H., %	Temp., °F.	Time, hr.	R.H., %	Temp., °F.	Time, hr.
A		None		50	73	24
B	68-99	52-76	0.5	50	70	24-48
C	50	73	24-96	50	73	24-96
D	34-36	77-78	8	50	72-73	16
E		None		51-65	74-76	--
F		None		52	71	48
G		None		50	73	24
H		None		50	73	24
I		None		51-54	69-73	--
J		None		50	73	0.5
K	50	73	24		None	
L		None		29-60	74-80	--
M		None		49-70	72-74	--
N	50	73	24	50	73	24
O		None		50	73	24
P	50	73	24-144	50	73	48
Q	47-54	72-74	18-24	43-54	71-72	1

A summary of the mill comparisons for the current period as compared with the previous period may be seen in Tables XXII and XXIII, respectively. The comparison for the various mills is given in Tables XXIV to XXXX, for the 42-lb. liner samples. A comparison of the special drum stock is given in Table XLI. In all the comparisons given in Tables XXII to XLI, the Institute's test values have been used as the reference line.

A comparison of the test data in Tables XXII and XXIII reveals the level of agreement between mill and Institute data for basis weight, caliper, bursting strength, and Elmendorf tear. Table XXII shows the average difference encountered in the comparison of Institute and mill test results for the sample lots submitted by each mill for the current period, as well as the maximum difference encountered in comparing the Institute and mill test results for a given sample lot. In Table XXIII, the average differences shown for each test in Table XXII have been calculated on a percentage basis for each mill. In addition, for purposes of comparison, the average percentage differences for the preceding two periods are shown.

It may be noted in Table XXIII that the maximum variation between the average basis weight results of the Institute and those of a given mill on corresponding samples is one per cent for the current period. By comparison, the maximum percentage variation noted for the previous two periods was two per cent. A variation of the magnitude of one per cent indicates that the agreement between Institute and mill test results is highly satisfactory. Further, it may be noted that the average basis weight results for Mills A, C, F, I, J, K, L, M, and N are slightly lower than those for the Institute, the average results for Mills D, E, H, O, P, and Q are slightly higher and the average results for Mills B and G are the same.

The maximum variation in caliper for the current period is eight per cent. This variation is nearly the same as the maximum variations for the previous two periods---namely, seven per cent. Compared with the Institute's test results, the test results for all mills are slightly

lower with the exception of the result for Mill B which is the same as that for the Institute. The variation noted for Mill E is very large, as it has been for several periods. The variations for Mills C and Q appear to be on the borderline.

It may be noted in Table XXIII that the bursting strength results exhibit a maximum variation of nine per cent (Mill F) for the current period. This is the only excessive variation noted for the current period. The average results for Mills A, B, C, D, E, F, G, I, K, and N are higher than those for the Institute, the results for Mills H and Q are the same, and the results for the other mills are lower. The agreement in bursting strength results is very good for all mills except Mill F.

It may be seen in Tables XXII and XXIII that the average machine direction tear results for Mills D, G, I, M, N, and P are higher than those for the Institute, and the results for the other mills are lower. The maximum variation for the current period is nineteen per cent. The differences encountered for Mills C, E, and G appear to be excessive; the variations for Mills E and G are especially large.

With regard to the cross-machine direction tear results, it may be noted that the average results for Mills D, G, I, J, K, and Q are higher than those for the Institute, the average result for Mill M is the same, and the average results for the other mills are lower. The maximum variation for the current period is twenty per cent. The only obviously excessive difference is the variation of twenty per cent associated with Mill N. Several other mills exhibit variations which are on the borderline--namely, Mills E and G.

TABLE XXII

SUMMARY OF TEST RESULT COMPARISONS
(Average Mill and Institute Results)

	Mills*																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
No. of Samples Compared	6	6	8	9	3	3	9	10	7	6	2	8	5	5	1	11	5
Basis Weight																	
Institute	43.3	42.7	42.8	42.5	41.6	42.8	42.5	43.1	42.7	43.4	44.0	42.7	42.9	42.6	42.4	43.2	42.6
Mill	42.9	42.7	42.7	43.0	41.7	42.5	42.5	43.4	42.6	43.0	43.8	42.3	42.8	42.4	42.8	43.4	42.7
Av. Diff.**	-0.4	0.0	-0.1	+0.5	+0.1	-0.3	0.0	+0.3	-0.1	-0.4	-0.2	-0.4	-0.1	-0.2	+0.4	+0.2	+0.1
Max. Diff.***	-0.8	-0.5	-0.6	+1.5	+0.3	-0.6	+0.5	+0.6	±0.4	-0.8	-0.7	-1.3	-0.5	-0.6	+0.4	+1.1	±0.4
Caliper																	
Institute	12.6	11.9	13.6	12.9	13.4	11.9	12.5	12.4	12.6	12.8	13.1	13.2	13.0	12.8	11.9	12.6	13.5
Mill	12.2	11.9	13.0	12.8	12.3	11.6	12.0	12.2	12.3	12.3	12.8	12.9	12.5	12.4	11.6	12.3	12.8
Av. Diff. **	-0.4	0.0	-0.6	-0.1	-1.1	-0.3	-0.5	-0.2	-0.3	-0.5	-0.3	-0.3	-0.5	-0.4	-0.3	-0.3	-0.7
Max. Diff.***	-0.6	-0.2	-0.8	-0.5	-1.1	-0.5	-0.8	-0.4	-0.6	-0.8	-0.3	-0.9	-0.8	-0.5	-0.3	-0.6	-0.9
Bursting Strength																	
Institute	109	118	104	108	108	103	109	107	107	108	100	112	115	107	121	113	107
Mill	111	119	107	109	110	112	111	107	109	105	102	107	113	109	116	109	107
Av. Diff.**	+2	+1	+3	+1	+2	+9	+2	0	+2	-3	+2	-5	-2	+2	-5	-4	0
Max. Diff.***	+6	+3	+4	+9	+9	+12	+6	±4	+6	-6	+6	-11	-3	+7	-5	-12	± 4
Tearing Strength, in																	
Institute	321	312	321	355	321	380	317	348	317	384	390	330	354	378	361	354	330
Mill	307	301	279	361	262	371	377	318	325	374	373	318	357	411	340	364	315
Av. Diff.**	-14	-11	-42	+6	-59	-9	+60	-30	+8	-10	-17	-12	+3	+33	-21	+10	-15
Max. Diff.***	-32	-37	-67	+27	-83	-21	+85	-48	+18	-24	-28	-59	+23	+45	-21	+44	-49
Tearing Strength, across																	
Institute	375	365	362	385	346	421	364	389	379	373	386	375	382	418	418	392	362
Mill	363	364	345	393	303	416	405	361	396	397	400	374	382	502	392	378	367
Av. Diff.**	-12	-1	-17	+8	-43	-5	+41	-28	+17	+24	+14	-1	0	-84	-26	-14	+5
Max. Diff.***	-32	-6	-52	+34	-56	-8	+61	-48	+28	+44	+15	+36	-16	+105	-26	-58	+25

* Comparison based on averages involved only those samples on which mill test data were submitted.

** Average difference is the difference between the Institute mill average and the mill average based on mill test data.

*** Maximum difference encountered in comparing the Institute average and the mill average for any sample submitted by that particular mill.

TABLE XXIII

COMPARISON OF INSTITUTE-MILL DIFFERENCES BY PERIODS

Mill	Period	Average Difference, per cent Basis Weight	Caliper	Bursting Strength	Tearing Strength, In	Across
A	Current	-0.9	-3	+2	-4	-3
	103rd	-0.9	-3	0	-6	-1
	102nd	-1	-0.8	-0.9	-4	-2
B	Current	0	0	+0.8	-4	-0.3
	103rd	+0.7	0	+0.8	+0.3	+6
	102nd	-0.5	+2	+3	-1	+6
C	Current	-0.2	-4	+3	-13	-5
	103rd	-1	-3	+5	-19	-6
	102nd	-0.7	-4	+6	-13	-3
D	Current	+1	-0.8	+0.9	+2	+2
	103rd	+0.9	-3	-0.9	+3	+0.3
	102nd	+1	-2	-4	+1	+1
E	Current	+0.2	-8	+2	-18	-12
	103rd	-0.9	-7	+2	-17	-7
	102nd	-0.5	-7	+7	-12	-4
F	Current	-0.7	-3	+9	-2	-1
	103rd	-0.2	-3	0	+2	+3
	102nd	-1	-3	-3	0	+3
G	Current	0	-4	+2	+19	+11
	103rd	+0.7	-2	-0.9	+14	+14
	102nd	-1	-2	-3	+19	+14
H	Current	+0.7	-2	0	-9	-7
	103rd	+0.7	-2	0	-15	-9
	102nd	+2	-0.8	0	-7	+6
I	Current	-0.2	-2	+2	+3	+4
	103rd	-1	-2	+2	+4	+2
	102nd	-0.7	-0.8	+4	+3	+5
J	Current	-0.9	-4	-3	-3	+6
	103rd	-0.5	-4	-3	-5	+4
	102nd	-0.9	-4	-3	-11	-4
K	Current	-0.5	-2	+2	-4	+4
	103rd	0	-4	+2	-7	+2
	102nd	-2	-4	-0.9	-8	+0.7
L	Current	-0.9	-2	-4	-4	-0.3
	103rd	-1	-5	-3	-11	-4
	102nd	-1	-4	-3	-13	-7
M	Current	-0.2	-4	-2	+0.8	0
	103rd	-1	-5	-0.9	-13	-10
	102nd	-2	-7	+0.9	-11	-9
N	Current	-0.5	-3	+2	+9	-20
	103rd	+0.5	-3	+2	+5	+14
	102nd	-0.9	-2	-3	+4	+14
O	Current	+0.9	-3	-4	-6	-6
	103rd	--	--	--	--	--
	102nd	+0.7	-2	-4	-6	-2
P	Current	+0.5	-2	-4	+3	-4
	103rd	+1	-3	0	+7	+2
	102nd	0	-2	-3	+6	0
Q	Current	+0.2	-5	0	-5	+1
	103rd	-1	-6	0	-1	-0.3
	102nd	-1	-4	+1	+3	+6

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956

TABLE XXIV

MILL A--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168262	A-726	W.F.	1/29/56	1	43.5	43.2	-0.3	12.6	12.2	-0.4	102	108	+6	327[a]	312	-15	361[a]	370	+ 9
168263	A-727	W.F.	1/30/56	2	42.6	42.5	-0.1	12.8	12.2	-0.6	112	113	+1	306	305	- 1	385[a]	369	-16
168373	A-728	W.F.	2/ 5/56	2	43.6	42.8	-0.8	12.8	12.3	-0.5	107	110	+3	343	311	-32	376[a]	377	+ 1
168374	A-729	W.F.	2/ 7/56	1	43.7	43.0	-0.7	12.4	12.1	-0.3	110	111	+1	339[a]	308	-31	385[a]	359	-26
168492	A-730	W.F.	2/12/56	1	42.9	42.9	0.0	12.5	12.2	-0.3	111	112	+1	300	300	0	373[a]	341	-32
168493	A-731	W.F.	2/12/56	1	43.6	42.9	-0.7	12.6	12.2	-0.4	111	114	+3	309	308	- 1	371[a]	364	- 7
Current Mill Average:					43.3	42.9	-0.4	12.6	12.2	-0.4	109	111	+2	321	307	-14	375	363	-12

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXV

MILL B--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168251	B-1266	W.F.	1/25/56	1	42.5	42.6	+0.1	11.9	12.0	+0.1	117	118	+1	297[a]	297	0	363[a]	359	- 4
168252	B-1267	W.F.	1/27/56	1	42.2	42.4	+0.2	11.8	11.9	+0.1	116	119	+3	291[a]	296	+ 5	361[a]	365	+ 4
168375	B-1268	W.F.	2/ 1/56	1	42.9	42.9	0.0	12.0	11.8	-0.2	117	119	+2	307[a]	297	-10	371[a]	365	- 6
168376	B-1269	W.F.	2/ 4/56	1	43.0	43.3	+0.3	11.9	11.9	0.0	118	117	-1	343[a]	306	-37	358[a]	359	+ 1
168405	B-1270	W.F.	2/ 8/56	1	42.7	42.2	-0.5	11.8	11.7	-0.1	120	120	0	313[a]	301	-12	367[a]	369	+ 2
168406	B-1271	W.F.	2/10/56	1	42.6	42.8	+0.2	12.0	11.9	-0.1	118	120	+2	320[a]	305	-15	371[a]	369	- 2
Current Mill Average:					42.7	42.7	0.0	11.9	11.9	0.0	118	119	+1	312	301	-11	365	364	- 1

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXVI

MILL C--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168264	C-729	WF ISL	1/16/56	1	43.1	42.5	-0.6	13.4	13.1	-0.3	105	108	+3	319[a]	252	-67	377[a]	325	-52
168265	C-730	WF ISL	1/16/56	1	43.1	42.6	-0.5	13.5	13.0	-0.5	106	108	+2	317	263	-54	351[a]	323	-28
168266	C-731	WF ISL	1/19/56	1	43.3	42.8	-0.5	13.9	13.3	-0.6	108	108	0	324[a]	263	-61	373[a]	329	-44
168267	C-732	WF ISL	1/19/56	1	43.4	43.0	-0.4	14.0	13.2	-0.8	106	108	+2	327[a]	265	-62	355[a]	330	-25
168268	C-733	WF ISL	1/24/56	1	42.7	42.8	+0.1	13.6	13.0	-0.6	103	107	+4	333[a]	301	-32	367[a]	368	+ 1
168269	C-734	WF ISL	1/24/56	1	42.7	42.8	+0.1	13.5	12.9	-0.6	102	106	+4	320[a]	301	-19	367[a]	372	+ 5
168270	C-735	WF ISL	1/26/56	1	42.4	42.5	+0.1	13.5	12.9	-0.6	103	104	+1	317[a]	284	-33	364[a]	347	-17
168271	C-736	WF ISL	1/26/56	1	42.2	42.5	+0.3	13.6	12.9	-0.7	102	103	+1	311[a]	303	- 8	341[a]	362	+21
Current Mill Average:					42.8	42.7	-0.1	13.6	13.0	-0.6	104	107	+3	321	279	-42	362	345	-17

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXVII

MILL D--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168272	D-943	W.F.	2/ 2/56	4	42.9	43.1	+0.2	13.0	12.8	-0.2	105	104	-1	349[a]	341	- 8	393[a]	397	+ 4
168273	D-944	W.F.	2/ 3/56	4	41.4	42.4	+1.0	12.6	12.1	-0.5	108	108	0	351[a]	352	+ 1	357[a]	389	+32
168274	D-945	W.F.	2/ 4/56	4	42.6	44.1	+1.5	12.8	12.5	-0.3	105	109	+4	348[a]	364	+16	375[a]	409	+34
168436	D-946	W.F.	2/ 9/56	4	42.1	42.1	0.0	13.0	12.9	-0.1	108	105	-3	349[a]	352	+ 3	381[a]	372	- 9
168437	D-947	W.F.	2/10/56	4	42.7	43.1	+0.4	12.8	12.8	0.0	111	115	+4	354[a]	360	+ 6	405[a]	405	0
168438	D-948	W.F.	2/11/56	4	41.6	41.8	+0.2	13.0	13.0	0.0	112	108	-4	361[a]	388	+27	377[a]	371	- 6
168504	D-949	W.F.	2/15/56	4	43.4	44.6	+1.2	13.3	13.3	0.0	106	115	+9	355[a]	368	+13	403[a]	412	+ 9
168505	D-950	W.F.	2/16/56	4	43.2	43.1	-0.1	12.8	12.6	-0.2	108	106	-2	363[a]	351	-12	379[a]	385	+ 6
168506	D-951	W.F.	2/17/56	4	42.6	43.1	+0.5	12.9	12.9	0.0	107	108	+1	361[a]	369	+ 8	393[a]	396	+ 3
Current Mill Average:					42.5	43.0	+0.5	12.9	12.8	-0.1	108	109	+1	355	361	+ 6	385	393	+ 8

TABLE XXVIII

MILL E--42-LB. LINERBOARD

168324	E-203	WF1S	2/ 3/56	2	41.8	42.1	+0.3	13.4	12.3	-1.1	112	112	0	319[a]	280	-39	359[a]	321	-38
168453	E-205	WF1S	2/13/56	2	40.7	41.0	+0.3	12.6	11.5	-1.1	107	116	+9	323[a]	267	-56	336[a]	280	-56
168578	E-206	WF1S	2/22/56	2	42.2	42.0	-0.2	14.0	13.0	-1.0	105	104	-1	322[a]	239	-83	343[a]	308	-35
Current Mill Average:					41.6	41.7	+0.1	13.4	12.3	-1.1	108	110	+2	321	262	-59	346	303	-43

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXIX

MILL F--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168498	F-6	W.B.	1/20/56	-	43.9	43.5	-0.4	12.0	11.7	-0.3	100	110	+10	367[a]	379	+12	419[a]	419	0
168474	F-7	W.B.	1/24/56	-	42.0	41.9	-0.1	11.9	11.6	-0.3	105	112	+ 7	389[a]	368	-21	405[a]	397	- 8
168499	F-8	W.B.	1/25/56	-	42.6	42.0	-0.6	11.9	11.4	-0.5	103	115	+12	385[a]	367	-18	439[a]	433	- 6
Current Mill Average:					42.8	42.5	-0.3	11.9	11.6	-0.3	103	112	+ 9	380	371	- 9	421	416	- 5

TABLE XXX

MILL G--42-LB. LINERBOARD

168435	G-708	W.F.	1/ 2/56	1	42.6	42.7	+0.1	12.6	12.1	-0.5	105	105	0	354[a]	389	+35	365[a]	426	+61
168407	G-709	W.F.	1/ 3/56	1	42.4	42.3	-0.1	12.6	12.1	-0.5	105	105	0	331[a]	390	+59	364[a]	407	+43
168408	G-710	W.F.	2/ 4/56	1	42.7	42.4	-0.3	12.6	12.0	-0.6	105	107	+ 2	348[a]	382	+34	371[a]	399	+28
168475	G-711	W.F.	2/ 9/56	2	41.7	42.0	+0.3	12.4	11.8	-0.6	108	108	0	303[a]	355	+52	362[a]	411	+49
168508	G-712	W.F.	2/10/56	2	41.8	42.0	+0.2	12.3	11.8	-0.5	102	108	+ 6	299[a]	380	+81	349[a]	399	+50
168509	G-713	W.F.	2/14/56	2	42.4	42.9	+0.5	12.2	11.9	-0.3	112	114	+ 2	283	368	+85	353[a]	400	+47
168510	G-714	W.F.	2/ 9/56	2	42.9	42.5	-0.4	12.4	11.9	-0.5	113	114	+ 1	307	370	+63	361[a]	403	+42
168511	G-715	W.F.	2/14/56	2	43.3	43.0	-0.3	12.6	11.8	-0.8	116	116	0	306	375	+69	375[a]	405	+30
168512	G-716	W.F.	2/14/56	2	42.8	43.1	+0.3	12.5	12.2	-0.3	114	118	+ 4	323	381	+58	381[a]	399	+18
Current Mill Average:					42.5	42.5	0.0	12.5	12.0	-0.5	109	111	+ 2	317	377	+60	364	405	+41

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXXI

MILL H--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168198	H-555	W.F.[b]	1/20/56	2	43.4	43.2	-0.2	12.4	12.2	-0.2	109	106	-3	336[a]	323	-13	377[a]	365	-12
168199	H-556	W.F.[b]	1/21/56	2	43.2	42.7	-0.5	12.5	12.2	-0.3	105	105	0	359[a]	313	-46	401[a]	364	-37
168202	H-557	W.F.[b]	1/23/56	2	43.7	43.8	+0.1	12.4	12.0	-0.4	108	107	-1	346[a]	322	-24	407[a]	369	-38
168203	H-558	W.F.[b]	1/24/56	2	43.6	44.0	+0.4	12.2	12.1	-0.1	113	109	-4	354[a]	335	-19	401[a]	381	-20
168377	H-559	W.F.[b]	1/31/56	2	42.8	43.4	+0.6	12.1	12.0	-0.1	104	108	+4	345[a]	324	-21	377[a]	357	-20
168378	H-560	W.F.[b]	2/ 2/56	2	43.4	44.0	+0.6	12.6	12.3	-0.3	104	105	+1	360[a]	343	-17	400[a]	390	-10
168439	H-561	W.F.[b]	2/ 6/56	2	42.0	42.6	+0.6	12.7	12.3	-0.4	103	104	+1	345	297	-48	384[a]	336	-48
168440	H-562	W.F.[b]	2/ 7/56	2	43.5	43.9	+0.4	12.7	12.6	-0.1	110	109	-1	363	327	-36	395[a]	362	-33
168500	H-563	W.F.[b]	2/12/56	2	43.5	43.8	+0.3	12.6	12.2	-0.4	107	108	+1	334[a]	301	-33	377[a]	349	-28
168501	H-564	W.F.[b]	2/13/56	2	42.3	42.8	+0.5	12.4	12.2	-0.2	102	103	+1	337	295	-42	367[a]	337	-30
Current Mill Average:					43.1	43.4	+0.3	12.4	12.2	-0.2	107	107	0	348	318	-30	389	361	-28

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

[b]The mill data sheet identifies the finish as WFlS.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXXII

MILL I--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168200	I-523	WFlS	1/19/56	1	42.2	42.6	+0.4	12.4	12.2	-0.2	104	110	+6	323[a]	339	+16	369[a]	393	+24
168201	I-524	WFlS	1/19/56	1	42.6	42.3	-0.3	12.6	12.2	-0.4	104	108	+4	321[a]	339	+18	369[a]	389	+20
168359	I-525	WFlS	2/ 2/56	1	43.0	42.6	-0.4	12.6	12.3	-0.3	103	108	+5	317[a]	323	+ 6	387[a]	395	+ 8
168360	I-526	WFlS	2/ 3/56	1	43.0	42.7	-0.3	12.8	12.2	-0.6	107	105	-2	327[a]	319	- 8	373[a]	390	+17
168473	I-527	WFlS	2/ 7/56	1	42.9	43.3	+0.4	12.9	12.8	-0.1	112	110	-2	315[a]	315	0	378[a]	397	+19
168514	I-528	WFlS	2/ 8/56	1	42.4	42.2	-0.2	12.2	12.3	+0.1	108	114	+6	305	323	+18	381[a]	409	+28
168515	I-529	WFlS	2/15/56	1	42.6	42.2	-0.4	12.3	12.1	-0.2	107	111	+4	313	320	+ 7	398[a]	403	+ 5
Current Mill Average:					42.7	42.6	-0.1	12.6	12.3	-0.3	107	109	+2	317	325	+ 8	379	396	+17

TABLE XXXIII

MILL J--42-LB. LINERBOARD

168210	J-577	W.F.	1/24/56	-	43.3	43.4	+0.1	12.7	12.2	-0.5	110	104	-6	381[a]	371	-10	390[a]	385	- 5
168211	J-578	W.F.	1/24/56	-	43.6	43.5	-0.1	12.8	12.6	-0.2	109	105	-4	399[a]	382	-17	379[a]	392	+13
168494	J-579	W.F.	1/24/56	-	43.1	42.5	-0.6	13.1	12.8	-0.3	108	104	-4	377[a]	385	+ 8	365[a]	409	+44
168495	J-580	W.F.	2/ 8/56	-	43.2	42.6	-0.6	12.6	12.0	-0.6	111	110	-1	380[a]	356	-24	374[a]	394	+20
168496	J-581	W.F.	2/ 8/56	-	43.7	42.9	-0.8	12.7	12.0	-0.7	103	103	0	387[a]	367	-20	367[a]	407	+40
168497	J-582	W.F.	2/ 9/56	-	43.7	43.0	-0.7	13.1	12.3	-0.8	106	103	-3	382[a]	385	+ 3	361[a]	395	+34
Current Mill Average:					43.4	43.0	-0.4	12.8	12.3	-0.5	108	105	-3	384	374	-10	373	397	+24

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXXIV

MILL K--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168280	K-4	S.F.	2/ 1/56	7	42.8	42.9	+0.1	13.0	12.7	-0.3	100	99	-1	362[a]	355	- 7	373[a]	388	+15
168507	K-5	S.F.	2/15/56	7	45.4	44.7	-0.7	13.1	13.0	-0.1	100	106	+6	418[a]	390	-28	399[a]	412	+13
Current Mill Average:					44.0	43.8	-0.2	13.1	12.8	-0.3	100	102	+2	390	373	-17	386	400	+14

TABLE XXXV

MILL L--42-LB. LINERBOARD

168275	L-425		1/ 9/56	1	43.1	42.7	-0.4	13.0	12.5	-0.5	111	105	- 6	323[a]	295	-28	372[a]	353	-19
168276	L-426		1/11/56	1	42.9	42.5	-0.4	13.6	13.2	-0.4	116	105	-11	333[a]	296	-37	387[a]	370	-17
168277	L-427		1/17/56	1	42.2	42.1	-0.1	13.3	13.2	-0.1	112	112	0	327[a]	357	+30	375[a]	387	+12
168278	L-428		1/20/56	1	41.7	41.7	0.0	13.3	12.4	-0.9	114	106	- 8	327[a]	273	-54	377[a]	364	-13
168379	L-429		1/25/56	1	42.5	41.8	-0.7	12.6	12.2	-0.4	116	112	- 4	326[a]	343	+17	363[a]	399	+36
168380	L-430		1/29/56	1	43.8	42.5	-1.3	13.5	13.2	-0.3	110	105	- 5	351[a]	292	-59	371[a]	357	-14
168549	L-431		2/ 2/56	1	43.0	42.3	-0.7	13.2	13.3	+0.1	112	109	- 3	331[a]	366	+35	381[a]	387	+ 6
168550	L-432		2/ 6/56	1	42.8	42.6	-0.2	13.4	13.5	+0.1	108	105	- 3	319[a]	323	+ 4	372[a]	380	+ 8
Current Mill Average:					42.7	42.3	-0.4	13.2	12.9	-0.3	112	107	- 5	330	318	-12	375	374	- 1

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXXVI

MILL M--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168204	M-361	W.	1/20/56	4	43.4	43.4	0.0	13.2	12.7	-0.5	112	109	-3	355[a]	351	- 4	363[a]	370	+ 7
168253	M-362	W.	1/23/56	2	41.9	41.8	-0.1	12.9	12.1	-0.8	112	112	0	349[a]	350	+ 1	391[a]	385	- 6
168411	M-363	W.	2/ 1/56	4	43.5	43.0	-0.5	12.9	12.6	-0.3	114	115	+1	362[a]	348	-14	371[a]	378	+ 7
168412	M-364	W.	2/ 7/56	4	43.0	43.1	+0.1	13.2	12.8	-0.4	117	114	-3	344[a]	351	+ 7	387[a]	371	-16
168577	M-365	W.	2/ 9/56	4	42.6	42.5	-0.1	13.0	12.2	-0.8	118	115	-3	359[a]	382	+23	399[a]	404	+ 5
Current Mill Average:					42.9	42.8	-0.1	13.0	12.5	-0.5	115	113	-2	354	357	+ 3	382	382	0

TABLE XXXVII

MILL N--42-LB. LINERBOARD

168205	N-183	WF1S	1/21/56	1	42.3	41.7	-0.6	12.7	12.2	-0.5	114	110	-4	383[a]	407	+24	420[a]	494	+ 74
168206	N-184	WF1S	1/21/56	1	42.0	41.7	-0.3	12.5	12.2	-0.3	108	115	+7	375[a]	406	+31	410[a]	515	+105
168409	N-185	WF1S	2/ 1/56	1	42.1	42.1	0.0	12.8	12.5	-0.3	107	110	+3	370[a]	395	+25	414[a]	507	+ 93
168410	N-186	WF1S	2/ 1/56	1	43.5	43.2	-0.3	12.9	12.8	-0.1	101	104	+3	375	420	+45	413[a]	501	+ 88
168513	N-187	WF1S	2/13/56	1	43.2	43.0	-0.2	12.9	12.5	-0.4	104	106	+2	384[a]	428	+44	435[a]	490	+ 55
Current Mill Average:					42.6	42.4	-0.2	12.8	12.4	-0.4	107	109	+2	378	411	+33	418	502	- 84

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XXXVIII

MILL O--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168249	O-104	W.F.	1/23/56	4	42.4	42.8	+0.4	11.9	11.6	-0.3	121	116	-5	361[a]	340	-21	418[a]	392	-26
Current Mill Average:					42.4	42.8	+0.4	11.9	11.6	-0.3	121	116	-5	361	340	-21	418	392	-26

TABLE XXXIX

MILL P--42-LB. LINERBOARD

168242	P-144	W.F.	1/10/56	-	44.2	44.8	+0.6	12.6	12.2	-0.4	115	113	-2	351[a]	335	-16	417[a]	359	-58
168243	P-145	W.F.	1/10/56	-	43.9	43.3	-0.6	12.4	11.9	-0.5	117	112	-5	348[a]	320	-28	405[a]	369	-36
168244	P-146	W.F.	1/10/56	-	43.5	43.1	-0.4	12.5	12.0	-0.5	116	110	-6	353[a]	332	-21	412[a]	379	-33
168245	P-147	W.F.	1/10/56	-	43.3	44.0	+0.7	12.2	12.1	-0.1	114	112	-2	349[a]	393	+44	400[a]	379	-21
168246	P-148	W.F.	1/11/56	-	43.4	42.9	-0.5	12.6	12.3	-0.3	117	105	-12	373[a]	379	+ 6	388[a]	367	-21
168247	P-149	W.F.	1/12/56	-	43.3	43.9	+0.6	12.1	12.0	-0.1	113	107	-6	381[a]	403	+22	395[a]	361	-34
168248	P-150	W.F.	1/20/56	-	43.1	43.9	+0.8	13.2	12.6	-0.6	109	106	-3	348[a]	371	+23	372[a]	384	+12
168612	P-151	W.F.	2/ 1/56	-	41.4	41.2	-0.2	12.6	12.3	-0.3	110	108	-2	323[a]	351	+28	363[a]	384	+21
168613	P-152	W.F.	2/ 1/56	-	43.8	43.2	-0.6	12.5	12.3	-0.2	119	112	-7	365[a]	389	+24	393[a]	395	+ 2
168614	P-153	W.F.	2/17/56	-	42.4	43.5	+1.1	12.7	12.3	-0.4	110	109	-1	349[a]	359	+10	377[a]	392	+15
168615	P-154	W.F.	2/17/56	-	43.1	43.3	+0.2	13.2	12.6	-0.6	107	104	-3	360[a]	379	+19	387[a]	392	+ 5
Current Mill Average:					43.2	43.4	+0.2	12.6	12.3	-0.3	113	109	-4	354	364	+10	392	378	-14

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XL

MILL Q--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
168279	Q-54	WFlS	1/30/56	-	43.1	42.7	-0.4	13.8	12.9	-0.9	106	109	+3	330[a]	313	-17	365[a]	379	+14
168413	Q-55	WFlS	2/ 3/56	3	42.9	43.3	+0.4	13.3	12.6	-0.7	113	112	-1	329[a]	317	-12	379[a]	359	-20
168414	Q-56	WFlS	2/ 5/56	3	42.3	42.3	0.0	12.9	12.6	-0.3	106	110	+4	327[a]	317	-10	344[a]	369	+25
168415	Q-57	WFlS	2/ 6/56	3	43.5	43.6	+0.1	14.4	13.6	-0.8	104	102	-2	358[a]	309	-49	371[a]	371	0
168516	Q-58	WFlS	2/15/56	3	41.4	41.7	+0.3	13.0	12.6	-0.4	107	103	-4	305[a]	319	+14	349[a]	356	+ 7
Current Mill Average:					42.6	42.7	+0.1	13.5	12.8	-0.7	107	107	0	330	315	-15	362	367	+ 5

TABLE XLI

MILL E--MISCELLANEOUS

47-lb. Drum Linerboard

168323	E-202	W.F.	1/31/56	2	46.8	46.9	+0.1	14.3	13.4	-0.9	104	96	-8	405[a]	386	-19	426[a]	397	-29
Current Mill Average:					46.8	46.9	+0.1	14.3	13.4	-0.9	104	96	-8	405	386	-19	426	397	-29

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--FEBRUARY 1 THROUGH FEBRUARY 29, 1956 (continued)

TABLE XLI (continued)

MILL E--MISCELLANEOUS

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
33-lb. Linerboard																			
168383	E-204	WF1S	2/ 9/56	2	32.6	33.1	+0.5	10.1	9.3	-0.8	77	80	+3	275[a]	257	-18	267[a]	258	- 9
38-lb. Linerboard																			
168207	E-201	WF1S	1/27/56	2	37.8	37.6	-0.2	11.9	11	-0.9	92	93	+1	299[a]	245	-54	305[a]	285	-20

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.